AUG '88

zx mushroom club

ID 36644
MENLO PARK 0100
☎ (012) 46-8229
TELEX 3-21845 S.A.

Well this is it!

If the Club does not get 2 000 paid up members by the end of this month, then the club will cease to exist! This is not an idle threat, unfortunately. There are 4 500 members in the club at the moment, only 300 have paid their subs, and that is not enough to pay for the printing and admin costs for this month alone!

If you really care about the club and are following the articles in the newsletter, then you will pay your subs. You now know what the newsletter comprises of, the quality of the articles and the value of some of the information published in the newsletter. The article TURBO SPECTRUM sent to us by Coert Smidt last month, was purposely published to see what members reaction to the article would be and at the same time to see whether you as members actually read the newsletter. The article proved its point and very positively pointed out that there are a great many people who care about the newsletter, the club and do read the newsletter. Incidently, there was a spelling error in Coerts wonderful article! He spelt program with 2 m's!

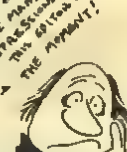
Our sponsor of the past couple of years, INFORMATION ENTERPRISES, will pay for the printing costs of this last newsletter. As a result, there will be a fair amount of their advertising included. I have had to do a lot of cajoling, begging (on all fours!), and bargaining to get the special prices offered in the newsletter. I would really urge you to take advantage of these offers, as you are not likely to see them again. Just have a look.

This newsletter will be published in the format that future newsletters will take (provided we get the support). The format will be as follows - All advertisments will be placed in the middle of the newsletter in such a way that they can be pulled out for those who object to them. Therefore only the articles will be left in the newsletter.

Now onto a much lighter subject. A modem has come out for the Z88 and hey is it small! I have never seen such a small modem - see inside for further details! PC Link II has also arrived and the technical guys at I.R. are looking at it to see what the difference is between the old one and this one. As yet I do not have an answer for you on that one. Oh yes, the modem has been handed into the Post Office for approval and we should have an answer by the end of the month. I do not see that there should be any problems, but you never know! Another interesting item which has arrived for the Z88 is the 512K RAM and EPROM packs for the computer. Now there will be some serious competition between the Z88 and other portables on the market, even with some PC's which are available! The 512K packs sell at R799.00 respectively.

Well, that is all that I have to say for the moment. I really hope that we get the required number of paid'up members so that the Club and the magazine can continue, after all when you have been involved in the Club for the past 5 years one becomes kind of attached to it and I really would miss editing the newsletter - and I would even miss seeing my spelling errors in print. After all where else would you be able to? The OPUN SPECIALS in the newsletter are just an example of some of the really special offers that I have been able to get hold of, so I also don't really want to go to the other people that I have been to see only to say that the Club no longer is able to exist. I am NOT a sucker for that sort of punishment or embarrassment!

THE MANY EXPRESSIONS OF THIS EDITOR AT THE MOMENT!



Lane

AN HOUR OF HUMAN SUFFERING

Next is an article in response to COERT SCHMIDT'S incompetent hijacking of our Club's magazine. This time it is a GENUINE routine that speeds up the 48K Spectrum Basic. It is a routine that I have put together from various computer magazines.

A note for those who are interested...

Spectrum Basic searches for each line from the beginning of the program, so when the computer finds a GOTO or GOSUB 9999 statement it starts its search at the beginning of the program and asks itself "Is this line 9999?" The answer is no and so it continues reading each line until it finds the right line number, (the reason that manuals say you should put subroutines at the beginning of programs).

This program works works by changing (or compiling) a Basic program so that the computer instead of reading line numbers, remembers the addresses at which the line numbers are positioned, and the Z80 microprocesor can find addresses far more quickly than it does line numbers.

1. Enter in the Basic DATA LOADER with the data lines from the enclosed listing and SAVE it to tape/cartridge before running. (This gives you some insurance).
2. RUN the program, and this should give the OK' sign.
3. SAVE the m/code as follows:
   SAVE "FAST BASIC" CODE 64058, 1310
4. To Load and Run it you must:
   CLEAR 64057: LOAD "" CODE: RANDOMIZE USR 64082
   and you'll get a new start up message in place of the original Sinclair Copyright message. (See if you can add your own name to it, instead of mine....I'll let you know later how to do it).
5. Then LOAD in your BASIC program that you want speeded up, and it will take a few momente to compile before it ripe into action'
6. MICRO-DRIVE users note'!!
   Everytime you use a m/drive command, FASTER BASIC is turned off. This can be overcome by including after every such command RANDOMIZE USR 64061.

ENJOY' ENJOY!

From: N. Jansen of Hellaren

FASTER BASIC

```
REM ****DATA LOADER****
CLEAR xxxx-1: LET g=9999: REM insert start address-1 here
LET a=xxxx: REM insert      start address here
FOR l=1 TO t1: REM t1=total no. of data lines
LET t=0: READ a$,v
IF LEN a$/2<>INT (LEN a$/2) THEN GO TO 9998
FOR c=1 TO LEN a$ STEP 2
LET x=CODE a$(c)-48-7*(a$(c)>="A")
LET y=CODE a$(c+1)-48-7*(a$(c+1)>="A")
POKE a,16*x+y
LET t=t+16*x+y
```

```
LET a=a+1
NEXT c
IF v<>t THEN GO TO 9998
NEXT l
PRINT AT 20,10;"DATA OK!--Ready to SAVE!"
GO TO g
PRINT AT 21,9;"ERROR in line ";1000+l*10
STOP
```

OPEN LETTER

Dear Mr Schmidtt.

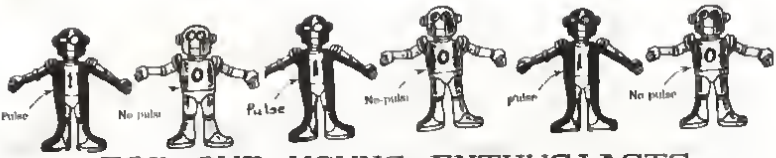
As a regular reader of those pages that received your unwarranted attack in the last issue, I must deliver my own point of view. I run a factory on Spectrums and so am a regular customer of I.E. My experience is that if you want service, knowledge and back-up that is beyond I.E. then they will attempt to put you in contact with someone who can. If you don't like that state of affairs then go to a retail outlet and pay their prices. So what if I.E. can't provide all of these things, you can't have everything and low price as well. Incidentally have you tried seeing what service you get from Dions these days?

People who write, editors etc are notorious for their lack of understanding of things mechanical or electrical, conversely I've yet to meet an engineer that could write! That statement is supported by the constant exhortations for printable articles in the magazine. While on the subject of writing, criticism is only reasonable if supported by alternatives, otherwise it becomes destructive. Now I'm sure that you don't want to be destructive, which obviously means that you intend to publish an alternative Newsletter, Do you?. Or perhaps you intend to write a number of articles on computing or programming for this Newsletter in order to make it so much more worthwhile. Whichever you decide to do I look forward in anticipation to seeing some measure of your level of Intelligence.

By the way I'm quite sure that I.E. would have published your letter if you had asked them. I've sent a similar letter to Sinclair User because in the last issue there were two (count them 2) pages worth reading, the rest was just advertising and Jon Rigier.

Yours in anticipation

Tony Prince.



FOR OUR YOUNG ENTHUSIASTS

THE LANGUAGE OF COMPUTING

Jacqueline Snell

SPEAKING IN TONGUES!!! BASIC HAS A FAMILIAR MATHEMATICAL CONSTRUCTION, AND SO IS RELATIVELY EASY TO LEARN, BUT IT IS CLUMSY IN RELATION TO SOME OF THE OTHER LANGUAGES

BASIC-ENGLISH
ENGLISH-BASIC

A much-maligned language, BASIC was developed out of FORTRAN (which was one of the first high-level program languages, and is still the most popular for scientific and engineering applications) as a tutorial introduction to programming, for university students.

Because it was intended for self - tutorial use BASIC is usually interpreted rather than compiled, and this factor has been the main reason why it has become the native language of almost all home computers. Interpreted languages are cheap to implement, use comparatively little computer memory and are extremely suitable for program development.

BASIC is now a powerful language in its own right, but is hindered by its variety of non-standard dialects (every computer's BASIC is unique to that machine), and its lack of specialised data and control structures. These limitations mean that self-taught programmers can develop bad programming technique, and that good programming technique can be difficult to apply to specific problems in BASIC. The program that follows illustrates the appeal and generality, but also the limitations of BASIC

PASCAL-ENGLISH
ENGLISH-PASCAL

PASCAL was developed in the early 1970's as the successor to BASIC. It's range of data and control structures derive from the FORTRAN/ALGOL group of languages and these are intended to encourage the student to approach programming in a systematic way, and to write well-structured, easily understood code. This is very desirable for developing good programming technique, but it does not mean that the early stages of learning programming are harder for the complete beginner - in part because of the discipline that the language imposes, and also because it is usually compiled rather than interpreted. Nevertheless, PASCAL programs tend to be elegant, relatively quickly developed, and much easier to understand.

```
**************************
*                        *
*  As with human languages,  *
*                        *
*  the more programming  *
*                        *
*  languages you have mas-  *
*                        *
*  tered, the easier it is  *
*                        *
*  to adopt a new one.   *
*                        *
**************************
```

AN IMPORTANT ANNOUNCEMENT TO ALL

THE OPUM RULE

When you see this sign in the newsletter, it means that Only Paid-Up Members may benefit from the special offer.

You are NOT a paid up member if you still receive the newsletter, you are only a paid-up member once you have paid your R10.00 subscription fees. So, become a paid-up member and benefit from these really explosive specials!

JOYSTICK INTERFACE

INTERFACE 2 SPECIAL

This is the BEST value for money interface around!
The INTERFACE 2 is the interface for 2 joysticks!
2 players, twice the fun at half the price!

Normal Price	R39.99
SPECIAL PRICE	24.99
P&P	1.50

Only 10 in stock at this price, so avoid disppointment and save your keyboard from a hammering now!

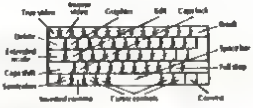
SPECIAL OPUM KEYBOARD OFFER

Turn your Spectrum into a Spectrum + – the official Spectrum Upgrade!

- *Attractive casing*
- *Single entry keys, eg: comma, load and many more*
- *Space Bar*
- *Spring loaded feet for angle*
- *Reset switch*
- *Easy to install*

Normal Price	R159.00
SPECIAL PRICE	139.00
P&P	3.00

Only 20 in stock at this price



Push your Sinclair to the limit

OPUM SPECIALS

DISC DRIVE (1)

For those of you who want to upgrade your system and get into the fast lane, now is the chance to do so. I.E. has 5.25" Double Sided, Double Density drives in stock at really unbelievable prices.

DISC DRIVES

FEATURES
- *5.25"*
- *Slimline*
- *J.V.C. Japanese drives*
- *Uncased*
- *Fully guaranteed and brand new*
- *Suitable for Spectrums/QL/I.B.M. compatibles*

Normal Price	R259.00
SPECIAL PRICE	199.00
P&P	5.00

DISC DRIVE SPECIAL (2)

only 5 in stock

- Uncased
- 35"
- Slimline
- Used, but fully serviced by Tony Wagner
- Complete backup

Normal Price	R199.00
SPECIAL PRICE	119.00
P&P	5.00

CABLE FROM DRIVE TO INTERFACE

You will need a cable to connect up your interface. I.E. will be able to supply the neccessary cable for you - 36 way cable with FC socket for the interface and an edge connector to the drive.

Normal Price	R39.99
SPECIAL PRICE	29.99
(ONLY if ordered with the above drive)	
SPECIAL PRICE	19.99
(ONLY if ordered with the above drive and +D interface)	

THE ULTIMATE SPECTRUM UPGRADE!

PLUS D DISC/PRINTER INTERFACE

This is the most compact interface available for the Spectrum. The +D is not only a disc interface, but also a printer interface! What a bargain!

The +D features:-

- *Neat compact design*
- *Very powerful and easy the use*
- *Disc and Parallel Printer interface*
- *Snapshot button for instant transfer of programs from tape to disc*
- *Snapshot button for screen dumps*

SPECIALS FOR OMN MEMBERS

Normal Price R259.00

Normal Price R259.00
SPECIAL PRICE .235.00 P&P R2.00
(ONLY if purchased with the disc drive)
SPECIAL PRICE 225.00 P&P R14.00
(ONLY if purchased with the Star Printer and Disc Drive)

---

star the ComputerPrinter

Star gemini 160

star the ComputerPrinter

Remarkable features

Compatibility

FEATURES:-

- 160 cps in draft mode
- Near Letter Quality
- 8K buffer (largest buffer in printers under R1000)
- Inexpensive ribbon
- Fully guaranteed by EMBEL DATA of PROTEA TECHNOLOGY

Normal Price R599.00
SPECIAL PRICE 349.00
P&P 15.00

Paper feed
Friction and push tractor feed, single sheet

Stock is limited to only 25 printers at this price

PRINTER LEADS

OPUM SPECIAL	NORMAL	SPECIAL	P&P
IBM cable	R24.99	R16.50	2.00
OPUS printer cable	29.99	22.95	2.00
ID printer cable	29.99	22.95	2.00

If you are an OPUM member and you purchae this printer, then you will automatically qualify for even more special specials!!

You will be able to get an interface for your printer at really explosvive prices - just look!

Ramprint

INTERFACE

RAMPRINT INTERFACE

This Menu Driven interface is a real must for those of you who do not want to bother with loading of software and all that jazz! The RAMPRINT interface has a built-in wordprocessor which is immediately available when you power up!

Normal Price R159.00
SPECIAL PRICE 139.00
P&P 2.00

EXLPRINT INTERFACE

This is also a hasale free interface which is also Menu Driven and easy to use. This interface is an old favourate and still very popular, although it does not have features like built-in wordprocessors etc., but the EXLPRINT has a reliable, quality PC board which is very important.

Normal Price	R149.00
SPECIAL PRICE	129.00
P&P	1.00

QL CENTRONICS INTERFACE

This interface is a real must for serious QL users who have:
* A QL and need a printer
* Have a QL and another computer which has a Parallel Port

The Centronics interface enables you to use a Parallel Printer on the RS232 port

Normal Price	*R159.00*
SPECIAL PRICE	*119.00*
P&P	*1.00*

ZX SPECTRUM+2.

SPECTRUM +2 SPECIAL FOR UPUM MEMBERS

With this wonderful 128K Spectrum you will also get:-

* Free joystick
* Free games(6)
* *Manual and all the leads needed*
* *Fully guaranteed (see conditions)*
* *Brand new, just imported*

Other features of the +2 are:

* *Built-in Tape Recorder*
* *Built-in RGB Monitor port*
* *Built-in RS232 Printer port*
* *Built-in keypad port*
* *Built-in joystick interfaces (2)*
* *Reset switch*
* *Proper "switch" keyboard*

The amazing ZX Spectrum +2 has a built-in tape recorder to save you the bother of tape recorders and leads. The advanced 128K memory lends you get the most from the vast universe of games available

You get all this and more from a +2 and you will still be able to load all your favourate 48K programs. I.E. has no yet found a game that they could not get to load on a +2

Normal Price	R699.00
SPECIAL PRICE	509.00
P&P	14.00

ZX SPECTRUM + 3.

SPECTRUM +3 SPECIAL FOR OPUM MEMBERS

You thought the +2 was value for money and a great deal? Just have a look and see what the +3 has to offer you!

You get:-

- Free Joystick
- Free games (6 on disc)
- *Fully guaranteed*
- *Brand new and just imported*

ZX SPECTRUM +3.

The new Sinclair ZX Spectrum +3 is a real hero - because it helps you to be one

Features of the +3

- *Built-in 3" disc drive*
- *Built-in interface for a second disc drive*
- *Built-in interface for Parallel printers*
- *Built-in interface for Serial printers*
- *Built-in joystick interfaces (2)*
- *Port for tape recorder so that you can still use your old games that you have not yet transferred*
- *128K memory (of course!)*
- *Built in RGB Monitor port*
- *Proper "switch" keyboard*
- *Reset switch*

You get this and much more from a +3 which is the best value for money home or business computer of its price on the market (in fact the +3 is better value for money than some I.B.M. compatible clones!).

Price on the open market	R1 099.00
Normal Price	899.00
SPECIAL PRICE	789.00
P&P	15.00

Modem Z 8 8

COMMUNICATIONS

Not yet available - at the Post Office For Approval

With portable modems seemingly shrinking all the time, many Z-88 owners have discovered the world of portable comms.

AN INTELLIGENT POCKET MODEM COMPLETE WITH CABLES AND USER GUIDES FOR USE WITH THE Z88 COMPUTER

*ACTUAL SIZE before Reduction

The other Day I had a Cold''. Not just any Cold you understand but the worst Cold that anybody ever had. The germs should have been saved for posterity'. Anyway, recouperating from this 'ere Cold. or was it Flu? gave rise to a "What shall I do now?" Day.

A Program that I've been meaning to get into for some time is "BACK-UP" by L.R. Railton. This program was/is marketed by I.E. with the words "It's self explanatory'/Menu driven". Now no disrespect intended but those few words usually mean that it isn't and doesn't. Anyway beyond buying the thing and checking to see whether it loaded it's been sitting gathering dust. Which was very silly really because it's a very powerful Utility that's worthy of a place in anybodies Tape Library.

On loading you should see a Window on Screen with above it a yellow marker saying 'MENU' and below it four options, TAPE FILE EDIT OTHER yes I was right it isn't!'

Now a little bit of detective work (bashing various Keys to see what happens) tells us that 'T' will get us to TAPE, 'F' to FILE, 'E' to EDIT and 'O' to OTHER. Always being partial to a 'bit of the Other' I started with 'O'. Pressing 'O' changes our yellow position marker to 'OTHER' and three new options appear under the Window. Beep Printer Quit.

Selecting 'B' brings "Beep Cycles = 1" into the Window. This means when a particular operation has finished your Spectrum will Beep once or whatever number you decide to put in there. Zero is the best one I can think of'. Enter brings you back to the Main Menu.

Selecting 'P' brings Printer into the Window and two options under it. Yes No. "If you have not got a ZX Printer connected do not select 'Y'". Too late huh! Ah well you'll just have to Load the program again.

Selecting 'Q' does the obvious.

Back to the 'MENU' screen then. Pressing 'E' gives us at this stage 'Out of DATA' in the Window. Hardly surprising since we haven't LOADed any Programs in!

Pressing 'F' gives us List Delete Move Status . Pressing 'S' gives at this stage 41237 bytes free. Remember this figure, this is the largest program you can work on. Pressing 'L','D' or 'M' will give 'Out of DATA'.

Pressing 'L' gives the longest sub-menu of all Load Save Verify Cat Baud.Set Press 'B' and the Window tells us Baud.Set 1. Under the Window we are told 0=Slow 1=Normal 2..9=Faster

Pressing Enter returns us to the MENU. For the record here are the various Baud Rates.

0=1430	1=1500
2=1860	3=1930
4=2750	5=3050
6=3240	7=3300
8=3470	9=3640

Obviously a certain amount of Trial and Error will be necessary when trying to Load Hyper Saved tapes. For the moment though lets leave the Baud Rate at 1 and Load in an ordinary Tape. The BACK UP tape will do as well as any, so rewind and Press 'L'. Our yellow status block changes to TAPE, Load appears in the window and we are asked 'Normal Slice' Slice is obviously

for so called 'Jerky Loaders' (I've heard stories about them, Filthy Pigs) but this time we prese 'N' for normal, a $1 should appear and when we press Play the Program/s will Load into the Memory.

While its Loading lets deal with the other options. 'Save' pretty obvious really except that we will be asked if we want to insert any Delays or not. 'Verify' is what we'd all do to our recorded Programs if we had the time. 'Cat' will catalogue the Tape, useful if, like me, you've got ten Tapes that you don't know what's on them. Careful though, once the info has scrolled off the screen you can't get it back.

Meanwhile, back at the Ranch, you've read in the back-up tape. To get back in control press Space or Break. Pressing 'F' brings up the FILE menu 'List Delete Move Statue' 'L' brings program $1 on the screen telling us that it's called "BCODE", it's a Program File, 50 bytes long, has no additional bytes as variables and will auto run from Line 1. Program #2 is also called "BCODE" but is a Machine Code File, will if allowed to Load to Memory location 30000 onwards and is 15535 bytes long.

'D' allows you to Delete selected Files and 'M' allows you to Move selected Files. These two of dubious value, but that's a personal view.

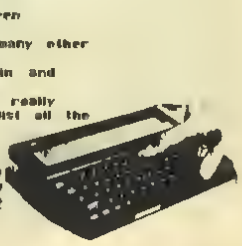
'E' for Edit gets us to the really powerful part of the Program. When in the edit menu press a number to select the program that you want to Edit. Options under the Window will show 'Type Header Exceptions Finish'. 'T' for Type brings us the options 'Prog Data Code Hdless Other' some interesting possibilities here! May'be change from Prog to Data then load the whole thing as a String into a Variable and inspect it. Moving on to a Code File and selecting Header gives more interesting possibilities, being able to change the Name, Start Address or Length of the File, 'E' for Exceptions takes us on into very murky water indeed, Header or Block gives us Flag Parity Clear. What to do with these is unclear at the moment however I'm hoping that 'the fullness of time' will allow the mud to settle. In the mean time I hope that my missive will allow you to start using your BACK-UP.

Communications at your fingertips with the Z88...

Z88 SPECIAL OFFER

This computer is the ultimate portable computer and a real must for the businessman on the job and outside the office or away on business. This computer is not limited to the bussiness profession, if you are at all involved in education, a teacher, professor or even student then this computer is a must. The Z88 features

- "Silent" keyboard for undisturbing typing during lectures or conferences
- 32K on board memory which can be expanded to a maximum of 1MB, competition for some desktop PC's!
- 8 line by 100 character LCD supertwist screen
- Works for up to 20 hours on 4 A4 batteries
- Compatible with your IBM compatible PC and many other computers
- All personal management software all built in and instantly accessible
- These are just a few of a features of this really amazing machine, there is not enough room to list all the features!
- On Special for this month only



Normal Price (without PC Link)	£999.00
SPECIAL PRICE (with PC Link)	989.00
P&P	10.00
	999.00

NAME _____ _____ TEL _____ MEMBER REF # _

ADORESS _____

To: INFORMATION ENTERPRISES, PO Box 35644, Menlo Park, 0102

OESCRIPTION	PRICE
_____	R_____.__
_____	R_____.__
_____	R_____.__
_____	R_____.__
_____	R_____.__
_____	R_____.__

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ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

BY PHONE (0146) 30 774	BY POST PO BOX 35644 Menlo Park 0102	BY FAX 012) 46 5788
GENERAL ENQUIRIES (012) 46 8228	ie	ADVICE ON EQUIPMENT AND SOFTWARE (012) 46 8228
TECHNICAL ENQUIRIES PO BOX 35644 Menlo Park 0102	BY TELEX 321945	PAYMENT BY POST Send cheques/ POs made payable to I.E. PO BOX 35644 Menlo Park 0102

ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

POSTAGE AND PACKAGING

All items are registered for your protection. Remember to take your ID to the Post Office when collecting a parcel.

SUBTOTAL: R_____.__

POSTAGE: R_____.__

TOTAL: R_____.__

	Surface Mail	Air Mail
SOFTWARE		
1 Tape	1.15	1.50
2 Tapes	1.50	1.95
3 or more tapes	2.30	2.80
Packs	1.85	2.30
HARDWARE		
Interfaces (all)	1.85	2.30
Disc Drive (single)	5.90	9.00
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QL computer	8.00	14.50
Spectrum +	8.00	14.50
Spectrum + 2	10.00	13.80
Spectrum + 3	11.90	14.60
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Membrane	2.30	2.80
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Box of paper (2000)	3.00	5.00
Alphacom paper (1)	1.00	1.50
Alphacom paper (2)	1.50	2.00
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All keyboards	1.85	3.45
Zas Computer	5.00	7.50